

ABSTRACT OF THE DISCLOSURE

An apparatus and method are provided that allow a server to offload TCP/IP-related processing. The apparatus provides TCP-aware target adapter for accelerating TCP/IP  
5 connections between clients and servers, where the servers are interconnected over an Infiniband™ fabric and the clients are interconnected over a TCP/IP-based network. The TCP-aware target adapter includes an accelerated connection processor and a target channel adapter. The accelerated  
10 connection processor bridges TCP/IP transactions between the clients and the servers. The accelerated connection processor accelerates the TCP/IP connections by prescribing Infiniband remote direct memory access operations to retrieve/provide transaction data from/to the servers. The  
15 target channel adapter is coupled to the accelerated connection processor. The target channel adapter supports Infiniband operations with the servers, including execution of the remote direct memory access operations to retrieve/provide the transaction data.